

## INDEX

- Abdessemed, N., Sherwin, S. J. & Theofilis, V.** Linear instability analysis of low-pressure turbine flows, 57–83
- Abe, H.** *See* Antonia, Abe & Kawamura
- Adoua, R., Legendre, D. & Magnaudet, J.** Reversal of the lift force on an oblate bubble in a weakly viscous linear shear flow, 23–41
- Amiroudine, S.** *See* Zoueshtiagh, Amiroudine & Narayanan
- Antonia, R. A., Abe, H. & Kawamura, H.** Analogy between velocity and scalar fields in a turbulent channel flow, 241–268
- Balmforth, N. J., Von Hardenberg, J. & Zammett, R. J.** Dam-breaking seiches, 1–21
- Benzi, R.** *See* Sbragaglia, Benzi, Biferale, Chen, Shan & Succi
- Berloff, P., Kamenkovich, I. & Pedlosky, J.** A mechanism of formation of multiple zonal jets in the oceans, 395–425
- Biferale, L.** *See* Sbragaglia, Benzi, Biferale, Chen, Shan & Succi
- Charru, F.** *See* Mouilleron, Charru & Eiff
- Chen, H.** *See* Sbragaglia, Benzi, Biferale, Chen, Shan & Succi
- Crouch, J. D., Garbaruk, A., Magidov, D. & Travin, A.** Origin of transonic buffet on aerofoils, 357–369
- Drazen, D. A. & Melville, W. K.** Turbulence and mixing in unsteady breaking surface waves, 85–119
- Eiff, O.** *See* Mouilleron, Charru & Eiff
- Garbaruk, A.** *See* Crouch, Garbaruk, Magidov & Travin
- Gylfason, A. & Warhaft, Z.** Effects of axisymmetric strain on a passive scalar field: modelling and experiment, 339–356
- Holloway, A. G. L.** *See* Roach & Holloway
- Hutchins, N.** *See* Mathis, Hutchins & Marusic
- Kamenkovich, I.** *See* Berloff, Kamenkovich & Pedlosky
- Kawamura, H.** *See* Antonia, Abe & Kawamura
- Kim, W.** *See* Lorenzo-Trueba, Voller, Muto, Kim, Paola & Swenson
- Koch, W.** Acoustic resonances and trapped modes in annular plate cascades, 155–180
- Legendre, D.** *See* Adoua, Legendre & Magnaudet
- Lopez, J. M. & Marques, F.** Centrifugal effects in rotating convection: nonlinear dynamics, 269–297
- Magidov, D.** *See* Crouch, Garbaruk, Magidov & Travin
- Magnaudet, J.** *See* Adoua, Legendre & Magnaudet
- Marques, F.** *See* Lopez & Marques
- Marusic, I.** *See* Mathis, Hutchins & Marusic
- Mathis, R., Hutchins, N. & Marusic, I.** Large-scale amplitude modulation of the small-scale structures in turbulent boundary layers, 311–337
- Melville, W. K.** *See* Drazen & Melville
- Mouilleron, H., Charru, F. & Eiff, O.** Inside the moving layer of a sheared granular bed, 229–239
- Muto, T.** *See* Lorenzo-Trueba, Voller, Muto, Kim, Paola & Swenson

- Narayanan, R.** *See* Zoueshtiagh, Amiroudine & Narayanan
- Pai, M. G. & Subramaniam, S.** A comprehensive probability density function formalism for multiphase flows, 181–228
- Paola, C.** *See* Lorenzo-Trueba, Voller, Muto, Kim, Paola & Swenson
- Pedlosky, J.** *See* Berloff, Kamenkovich & Pedlosky
- Roach, D. C. & Holloway, A. G. L.** Combined effects of flow curvature and rotation on uniformly sheared turbulence, 371–394
- Sbragaglia, M., Benzi, R., Biferale, L., Chen, H., Shan, X. & Succi, S.** Lattice Boltzmann method with self-consistent thermo-hydrodynamic equilibria, 299–309
- Shan, X.** *See* Sbragaglia, Benzi, Biferale, Chen, Shan & Succi
- Sherwin, S. J.** *See* Abdessemed, Sherwin & Theofilis
- Subramaniam, S.** *See* Pai & Subramaniam
- Succi, S.** *See* Sbragaglia, Benzi, Biferale, Chen, Shan & Succi
- Swenson, J. B.** *See* Lorenzo-Trueba, Voller, Muto, Kim, Paola & Swenson
- Theofilis, V.** *See* Abdessemed, Sherwin & Theofilis
- Tian, Z. W. & Wu, Z. N.** A study of two-dimensional flow past regular polygons via conformal mapping, 121–154
- Travin, A.** *See* Crouch, Garbaruk, Magidov & Travin
- Lorenzo-Trueba, J., Voller, V. R., Muto, T., Kim, W., Paola, C. & Swenson, J. B.** A similarity solution for a dual moving boundary problem associated with a coastal-plain depositional system, 427–443
- Voller, V. R.** *See* Lorenzo-Trueba, Voller, Muto, Kim, Paola & Swenson
- Von Hardenberg, J.** *See* Balmforth, Von Hardenberg & Zammett
- Warhaft, Z.** *See* Gylfason & Warhaft
- Wu, Z. N.** *See* Tian & Wu
- Zammett, R. J.** *See* Balmforth, Von Hardenberg & Zammett
- Zoueshtiagh, F., Amiroudine, S. & Narayanan, R.** Experimental and numerical study of miscible Faraday instability, 43–55

CAMBRIDGE

## New and Exciting Titles!

### *New in Paperback Textbooks!*

#### Measurement in Fluid Mechanics

Stavros Tavoularis

\$60.00: Pb: 978-0-521-13839-0: 368 pp.

#### Fundamentals of Multiphase Flow

Christopher Brennen

\$65.00: Pb: 978-0-521-13998-4: 368 pp.

#### Introduction to Computational Fluid Dynamics

Anil Date

\$65.00: Pb: 978-0-521-14005-8: 398 pp.



Cambridge University Press' moderately priced textbooks are ideal for students studying engineering. Please visit us at [www.cambridge.org/us/textbooks](http://www.cambridge.org/us/textbooks) to review our list, request exam copies, or to contact your college sales rep.

#### Polymer Melt Processing

Foundations in Fluid Mechanics and Heat Transfer

Morton M. Denn

*Cambridge Series in Chemical Engineering*

\$99.00: Hb: 978-0-521-89969-7: 264 pp.

#### Multimedia Fluid Mechanics

Edited by G. M. Homsy

\$24.99: DVD ROM:  
978-0-521-72169-1

2nd Edition!



#### Heat Transfer

Gregory Nellis and Sanford Klein

\$155.00: Hb: 978-0-521-88107-4: 1148 pp.

#### Continuum Mechanics and Thermodynamics

Joanne Wegner and James Haddow

\$99.00: Hb: 978-0-521-86632-3: 280 pp.

Prices subject to change.

[www.cambridge.org/us/engineering](http://www.cambridge.org/us/engineering)



CAMBRIDGE  
UNIVERSITY PRESS

1584 • 2009

425 YEARS OF CAMBRIDGE  
PRINTING AND PUBLISHING



- 1 Dam-breaking seiches  
**N. J. Balmforth, J. von Hardenberg & R. J. Zammett**
- 23 Reversal of the lift force on an oblate bubble in a weakly viscous linear shear flow  
**R. Adoua, D. Legendre & J. Magnaudet**
- 43 Experimental and numerical study of miscible Faraday instability  
**F. Zoueshtiagh, S. Amiroudine & R. Narayanan**
- 57 Linear instability analysis of low-pressure turbine flows  
**N. Abdessemed, S. J. Sherwin & V. Theofilis**
- 85 Turbulence and mixing in unsteady breaking surface waves  
**D. A. Drazen & W. K. Melville**
- 121 A study of two-dimensional flow past regular polygons via conformal mapping  
**Z. W. Tian & Z. N. Wu**
- 155 Acoustic resonances and trapped modes in annular plate cascades  
**W. Koch**
- 181 A comprehensive probability density function formalism for multiphase flows  
**M. G. Pai & S. Subramaniam**
- 229 Inside the moving layer of a sheared granular bed  
**H. Moulleron, F. Charru & O. Eiff**
- 241 Analogy between velocity and scalar fields in a turbulent channel flow  
**R. A. Antonia, H. Abe & H. Kawamura**
- 269 Centrifugal effects in rotating convection: nonlinear dynamics  
**J. M. Lopez & F. Marques**
- 299 Lattice Boltzmann method with self-consistent thermo-hydrodynamic equilibria  
**M. Sbragaglia, R. Benzi, L. Biferale, H. Chen, X. Shan & S. Succi**
- 311 Large-scale amplitude modulation of the small-scale structures in turbulent boundary layers  
**R. Mathis, N. Hutchins & I. Marusic**
- 339 Effects of axisymmetric strain on a passive scalar field: modelling and experiment  
**A. Gylfason & Z. Warhaft**
- 357 Origin of transonic buffet on aerofoils  
**J. D. Crouch, A. Garbaruk, D. Magidov & A. Travin**
- 371 Combined effects of flow curvature and rotation on uniformly sheared turbulence  
**D. C. Roach & A. G. L. Holloway**
- 395 A mechanism of formation of multiple zonal jets in the oceans  
**P. Berloff, I. Kamenkovich & J. Pedlosky**
- 427 A similarity solution for a dual moving boundary problem associated with a coastal-plain depositional system  
**J. Lorenzo-Trueba, V. R. Voller, T. Muto, W. Kim, C. Paola & J. B. Swenson**
- 444 INDEX TO VOLUME 628

### Cambridge Journals Online

For further information about this journal please  
go to the journal web site at  
[journals.cambridge.org/flm](http://journals.cambridge.org/flm)



**FSC**  
Mixed Sources  
Product group from well-managed  
forests and other controlled sources

Cert no. SA-COC-1527  
[www.fsc.org](http://www.fsc.org)  
© 1996 Forest Stewardship Council

**CAMBRIDGE**  
UNIVERSITY PRESS